

RESEARCH INTEREST

I'm interested in speech and language processing. In particular, I am enthusiastic about building efficient and robust speech recognition systems in low-resource and multilingual settings. I'm also interested in understanding the intricacies of human-machine interactions towards building intelligent multimodal dialogue systems. Presently focussed on building speech data resources for Zambian languages.

EDUCATION

MSc., Machine Intelligence, Africa Institute of Mathematical Sciences (AIMS), Kigali, Rwanda Oct 2019 – Mar 2021

- Recipient of the Google and Meta (formerly Facebook) full scholarship to pursue the African Masters of Machine Intelligence programme at the Africa Institute of Mathematical Sciences (AIMS) in Kigali, Rwanda.
- Supervisor: Prof. Antonios Anastasopoulos
- Date of completion: **31/03/2021**
- **Comment:** completed (both course work and research project) just waiting for official results.

MSc., Information Technology Management, Binary University, Puchong, Malaysia Apr 2013 – Oct 2014

- Specialization: **Information Technology**

BSc., Computer Science, University of Zambia, Lusaka, Zambia Apr 2007 – Aug 2011

- Specialization: **Computer Systems Engineering**
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TEACHING EXPERIENCE

Lecturer, Department of Computer Science, University of Zambia, Zambia May 2015 – **Present**

- **Undergraduate Computer Science courses:**

CSC 2702 - Databases and Information System, University of Zambia	2021/2022
CSC 3712 - Advanced Databases, University of Zambia	2021/2022
CSC 4792 - Introduction To Data Mining, University of Zambia	2021/2022

Instructor, CISCO Academy, University of Zambia, Zambia Sep 2016 – Jun 2019

- Instructor of Python Programming, IT Essentials and Cisco Certified Network Associate (CCNA) Level 1 and Level 2 CISCO courses.

Teaching Assistant, Department of Computer Science, University of Zambia, Zambia Feb 2012 – May 2015

- Teaching assistant for Introduction to Databases course in the Department of Computer Science under the Staff Development Fellowship.
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PERSONAL DEVELOPMENT

- **Mathematics for Machine Learning Specialization** by Imperial College London on Coursera Nov 2019
Certificate of completion
 - **Deep Learning Specialization** by DeepLearningAI on Coursera Aug 2018
Certificate of completion
 - **Machine Learning** by Stanford University on Coursera Jul 2018
Certificate of completion
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PUBLICATIONS

- **C. Sikasote**, A. Anastasopoulos, *BembaSpeech: A Speech Recognition Corpus for the Bemba Language*, Proceedings of the Language and Resource Evaluation Conference (LREC), 2022.

- S. H. Chiwamba, J. Phiri, P. O.Y. Nkunika, **C. Sikasote**, M. M. Kabemba, M. N. Moonga, *Automated Fall Armyworm (Spodoptera frugiperda, J.E. Smith) Pheromone Trap Based on Machine Learning*, Journal of Computer Science 2019, 15 (12): 1759.1779

SCHOLARSHIPS AND AWARDS

- **African Master of Machine Intelligence Scholarship**, Kigali, Rwanda Sep 2019
- **Special Research Fellowship**, University of Zambia, Lusaka, Zambia Sep 2019
- **Binary University Scholarship**, Binary University, Malaysia Apr 2013
- **Staff Development Fellowship**, University of Zambia, Lusaka, Zambia Feb 2012
- **Zambia Higher Education Scholarship**, University of Zambia, Lusaka, Zambia Apr 2007

GRANTS

- **Lead Researcher/Co-PI**, Multimodal Datasets for the Bemba Language Project Apr 2021 - Aug 2022

TECHNICAL SKILLS

- **Programming Languages:** Python
- **Database technologies:** MS SQL, MySQL
- **Operating System platforms:** Windows, Linux
- **Machine Learning libraries:** Scikit-learn, Pandas, NumPy, SciPy
- **Data Visualization tools:** Matplotlib, tSNE
- **Deep Learning frameworks:** Pytorch, Tensorflow
- **Speech Recognition Tools:** DeepSpeech, FairSeq

OPEN-SOURCE DATASETS

- **Zambezi Voice** : A multilingual speech corpus for Zambian languages containing speech recognition data resources for three languages of Zambia. [ON-GOING]
Link: <https://github.com/unza-speech-lab/zambezi-voice>
- **BembaSpeech** : ASR corpus consisting of 24 hrs of read speech for the Bemba language spoken by over 30% of the population in Zambia.
Link: <https://github.com/csikasote/BembaSpeech>
- **Multimodal Dataset for the Bemba Language** : Large scale multimodal dataset for the Bemba language containing multi-turn image-grounded dialogues amounting to over 180 hours of speech with corresponding Bemba transcription and translation in English. The project was funded by *Lacuna Fund*.
Link: <https://github.com/csikasote/igc-mu-cibemba>
- **Multilingual ASR Corpus for African Languages** : Multilingual speech corpus consisting of over 60 hours of read speech for 19 African languages. I contributed 2 hours of read speech for Bemba language.
Link: <https://github.com/besacier/AMMICourse/tree/master/STUDENTS-RETURN>

STUDENT SUPERVISION AND MENTORING

- **Stanly Mwape**, Undergraduate, University of Zambia 2021/2022
- **Kalinda Siaminwe**, Undergraduate, University of Zambia, 2021/2022
- **Bangiwe Zulu**, Undergraduate, University of Zambia 2021/2022
- **Godfrey Mkandawire**, Undergraduate, University of Zambia 2021/2022

COMMUNITY SERVICE

- **Conference Volunteer**

International Conference on Learning Representations (ICLR)	Mar 2021
International Conference on Artificial Intelligence and Statistics (AISTATS)	Apr 2021